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Federal Communications Commission
Office of the Secretary

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

In the Matter of	)
	)
Advanced Television Systems and Their Impact on the Existing Television Broadcast Service	)
	) MM Docket No. 87-268
Review of Technical and Operational Requirements: Part 73E, Television Broadcast Stations	)
	)
Reevaluation of the UHF Television Channel and Distance Separation Requirements of Part 73 of the Commission's Rules	)

COMMENTS OF THE FIBER OPTICS DIVISION OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION IN RESPONSE TO TENTATIVE DECISION AND FURTHER NOTICE OF INQUIRY

The Fiber Optics Division of the Telecommunications Industry Association (hereinafter the Division)[1] is pleased to submit these comments in response to the above-captioned proceeding.

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[1] The Telecommunications Industry Association (TIA) is a full service national trade organization with nearly 600 members which provide materials, products, systems, distribution services and professional services to the telecommunications industry in the United States and countries around the world. TIA represents the telecommunications industry in association with the Electronic Industries Association (EIA).

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SUMMARY

The Division wishes to promote and support the development of a domestic HDTV. We concur with the conclusions expressed in the tentative decision of the subject document. We believe that the public should be offered television that is of the best quality available within the state of electronic technology. We also believe consideration of the impact of receiver standards on the use of a fiber optic transmission medium is of the utmost importance in providing this superior visual and audio definition to the consumer.

As a division within the Telecommunications Industry Association, we have taken part in HDTV discussions with other TIA divisions and participated in the EIA ATV Committee deliberations. We concur with the EIA comments being submitted in response to the tentative decision and further notice of inquiry.

FIBER OPTIC ADVANTAGES

The Division is particularly interested in the points discussed in par IV-D of the EIA comments, "Compatibility with Alternative Media", and considers it essential that the following advantages of fiber optic distribution of HDTV signals be clearly understood:

Superior Picture Quality

Fiber optic systems are immune to external interference and offer the widest bandwidth. As a result, more signal information can be sent and noise suppressing bandwidth expansion employed.

Maximum Channel Density

The wide bandwidth of optical fibers allows a large number of channels to be multiplexed on a single fiber . Further more, the small diameter of optical fibers allows many fibers to be incorporated in compact cables.

Conservation of Broadcast Spectrum

Fiber networks eliminate the need for additional use of the broadcast spectrum. If all users had access to a fiber network scarce broadcast channels could be reallocated to other services such as mobile radio.

Ease of Future Enhancements

Because fiber is a closed medium offering high Channel density, additional channels can be allocated at a later date.

Analog and Digital Operation

Traditionally, digital transmission has been used with optical fibers because of their wide bandwidth. Recent laser advances make possible their use with existing analog formats.

Compatibility with Telephone and CATV Networks

The telephone network has been switching to digital transmission while CATV has remained analog. Fiber optics can transmit both types of signals.

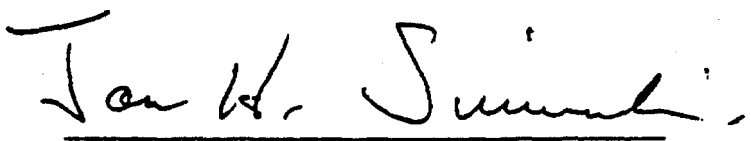
Thus fiber optics can be used to great advantage with any of the formats being used or considered for broadcast, cable and telephony.

CONCLUSION

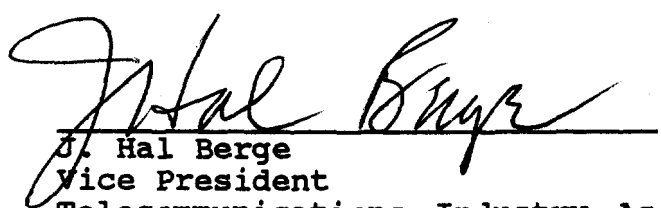
We urge that receiver standards be adopted that will not put any modulation approach at a disadvantage. Specifically, it should be required that receivers be built so that all of their features be equally accessible without quality reduction by all signal sources including digital and analog formats. Such architectures will minimize the cost of interconnection of advanced television sets to future fiber optic networks and assure that set owners will be fully able to utilize anticipated advanced features.

We additionally stress our members' wish and willingness to assist in developing an ATV standard which includes fiber optics as a transmission medium.

Respectfully submitted:



Jan H. Suwinski
Chairman
Fiber Optics Division



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DATE: November 30, 1988